

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: Shaw School District

Prepared By: Cheryl Arnold Ms. Forestry Commission

Time Period Covered by This Plan: 2012 - 2021

Date Plan Prepared: 2012-02-15

Plan Type: Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

Property Name: 16-T20N-R7W

TABLE OF CONTENTS

| LANDOWNER INFORMATION | 3 |
|----------------------------------|----|
| FORESTER INFORMATION | 3 |
| DISCLAIMER | 3 |
| INTRODUCTION | 3 |
| OBJECTIVES | 4 |
| PROPERTY DESCRIPTION | 4 |
| GENERAL PROPERTY RECOMMENDATIONS | 5 |
| SOIL TYPES | 7 |
| STANDS | 7 |
| PLAN MAP | 12 |
| PLAN MAP | 13 |
| STAND ACTIVITY SCHEDULE | 14 |

LANDOWNER INFORMATION

Name: Shaw School District

Mailing Address: P.O. Box 510 City, State, Zip: Shaw, MS 38773

Country: United States of America

Contact Numbers: Home Number:

Office Number: 662-754-6109 Fax Number: 662-754-2612

E-mail Address: ckbarrow@mde.k12.ms.us

Social Security Number (optional):

FORESTER INFORMATION

Name: Cheryl Arnold, Service Forester

Forester Number: 01662

Organization: Ms. Forestry Commission

Street Address: P.O. Box 1646

148 N. Edison St.

City, State, Zip: Greenville, MS 38702

Contact Numbers: Office Number: 662-332-3358

Fax Number:

E-mail Address: carnold@mfc.state.ms.us

PROPERTY LOCATION

County: Bolivar Total Acres: 642 Latitude: -90.93 Longitude: 33.58

Section: 16 Township: 20N Range: 7W

DISCLAIMER

This information was derived from a small sampling of the forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be reflected in this plan.

INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

OBJECTIVES

Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Wildlife Management - General

The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone.

PROPERTY DESCRIPTION

General Property Information

This section, 16-20-7, is located in the south eastern portion of Bolivar County, MS. The nearest town is Shaw, MS. The section is bordered on the North and South by cultivated fields. The West side is bordered by Cedar Creek. The East line is bordered by Richard Road which is gravel. Also, pistol slough runs along the east side of the section as well. A gas pipeline runs from the Northeast to the Southwest across the section. This section is approximately one mile North of hwy 450. It contains 327.78 acres of agricultural land and 313.77 acres of forest land.

Water Resources

Cedar Creek runs north and south along the western side of the section. It holds water intermittently during the year. Pistol Slough branches off the creek to the east just below the southern property line and then runs west beside Richard Road. The slough serves as a drainage carrying mostly runoff from fields and excess rain. The Mississippi River is located approximately 17 miles to the west. It poses no flood threat under normal conditions.

Timber Production

The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Threatened and Endangered Species

A reconaissance of the property was performed and no endangered or threatened species were found. The habitat on 16-20-7 provides no unique arrangement that would attract a particular endangered or threatened species, but the Mississippi Forestry Commission will continue to evaluate the section on a regular basis. The Black Bear has been located about

15 miles to the west of the section along the Mississippi River but none have been seen in close proximity to the section.

Interaction with Surrounding Property

Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

Soils General

Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other adverse effects on the soil. The following soils are identified for this property: Sharkey Clay, nearly level phase (Sb).

Archeological and Cultural Resources

These areas can range from churches, old cemetaries, Indian mounds, old home sites or other areas of historical significance. No Archeological or Cultural resources were identified during a reconnaissance of the property. However, if Archeological or Cultural resources are discovered at anytime on the property, special management measures will be applied immediately in order to preserve these sensitive areas.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A healthy and vigorously growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- · Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- · Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices*.

Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

Boundary Lines

It is the responsibility of the landowner to ensure that all property lines and boundaries designating areas to receive forestry work are clearly identified and visible to all contractors.

Note: Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

Water Quality Protection

The objective of the landowner is to protect, preserve and enhance all water sources on or transecting the property. This can best be achieved by implementation of Best Management Practices in all aspects of the management of the property.

Aesthetics

The goal is to assure that the property is managed in such a way that is aesthetically pleasing to the landowner as well as the community. Activities could include, maintaining buffer strips along the road and adjacent to the home site, planting wildflowers along the road, and trees with attractive fall and spring color along the drive and near the home site.

Ecological Restoration

Ecological restoration is the process of assisting the recovery of an ecosystem that has be degraded, damaged, or destroyed. A reconnaissance of the property has been conducted and no ecological restoration activities are recommended at this time.

Wildlife Mgt. Target Species

The objective of this practice is to provide habitat best suited for the featured or target species. Habitat management will focus on providing food, cover, water, and space to facilitate the target species.

Environmental Education

Environmental educational goals are to provide educational opportunities for children and adults through the development of items such as nature trails with tree identification markers, wildlife viewing areas, picnic areas, parking, public restroom facilities.

Wildlife Management General

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining access roads and firelanes, providing openings within the forest, and leaving mast producing and den trees.

Timber Management

Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production throughout the life of the stand.

Recreation

According to landowner objectives the recreational use of the property could prove to be an avenue for personal enjoyment or for generating income. An evaluation of your property should be conducted and a plan developed to accomplish your specific goals for recreational activities on your property.

SOIL TYPES

Soils Description

The dominant soil on section 16-20-7 is Sharkey Clay, nearly level phase and is found on 95 percent of the section. This is a dark-colored, poorly drained soil that formed from fine textured Mississippi River alluvium. It occurs on slack-water flats. The color ranges from grayish brown to very dark grayish brown. In most areas, this soil is medium acid to neutral. It contains a moderate amount of organic matter and has a slow permeability. The native trees were bottomland hardwoods of various kinds.

STANDS

Stand Sawtimber #1

This is a 61 year old bottomland hardwood stand with the main species being American Elm, Green Ash, Sugarberry, Bitter Pecan, and scattered oaks. It contains approximately 23 tons of sawtimber and 9 tons of pulpwood. The basal area is 79 square feet per acre. The stand contains approximately 116 trees per acre. The quality of the current stand is considered to be of low value and many of the sawtimber trees will have to be sold as pulpwood because of the defects in the stem. The stand is in a low lying area that tends to hold water during the wet season and after heavy rains.

Stand Recommendations

This stand should be allowed to grow for the next 10 years to increase the sawtimber volume and hopefully yield a better stand. The Mississippi Forestry Commission will monitor the stand on a yearly basis.

Stand Description

This stand contains 17.46 acres. The dominant species in this stand includes Bitter Pecan, Green Ash, Elm and Sugarberry. It is a bottomland hardwood stand of low quality with many low lying areas. The average diameter of the sawtimber trees is 15.6 inches at breast height. The average height of the sawtimber trees is approximately 26 feet. The average size of the pulpwood is 5.6 inches with approximately 16 feet of average height.

Stand Sawtimber #2

This is a 61 year old bottomland hardwood stand with the main species being American Elm, Green Ash, Sugarberry, Bitter Pecan, and scattered oaks. It contains approximately 23 tons of sawtimber and 9 tons of pulpwood per acre. The basal area is 79 square feet per acre. The average number of trees per acre is 116. The quality of the current stand is considered to be low because of the many defects found in the sawtimber trees. This decreases the value of the stand. The stand sits in a low lying area surrounded by a creek and slough on the west and east boundaries. This increases the amount of water the stand holds during the wet season and periods of high rain.

Stand Description

This is a small fragmented stand containing only 5.25 acres. The average sawtimber tree is approximately 16.5 inches at breast height and about 26 feet of merchantable height. The average size pulpwood tree is 5.6 inches with about 16 feet of height. This stand is of low quality. It consists of trees that border a drainage ditch on both sides, therfore providing protection from erosion and runoff. For this reason, it will be allowed to grow.

Stand Recommendations

This stand should be allowed to grow for the next 10 years to increase the hardwood sawtimber volume, and to continue to provide the erosion and runoff protection to the drainage it borders. It will be monitored by the Mississippi Forestry Commission on a yearly basis.

Stand Sawtimber #3

This is a 61 year old bottomland hardwood stand with the main species being American Elm, Green Ash, Sugarberry, Bitter Pecan, and scattered oaks. It contains approximately 23 tons of sawtimber and 9 tons of pulpwood per acre. The basal area is 79 square feet per acre. The stand also contains about 116 trees per acre. The quality of the stand is low due to the many stem defects in the sawtimber trees. It sits in a low lying area and has a creek on its west boundary and a slough on the east boundary. It will hold water in periods of heavy rain and during the wet season.

Stand Description

This stand contains approximately 221.97 acres. It is the largest and main stand of sawtimber on the section. The average diameter of the sawtimber trees is 15.6 inches at breast height and has about 26 feet of merchantable height. The average pulpwood size is 5.6 inches with about 16 feet of height. It is considered to be of low quality.

Stand Recommendations

This stand should be allowed to grow for the next ten years to increase the sawtimber volume and yield a better sale. The Mississippi Forestry Commission will monitor this stand on a yearly basis.

Stand Sawtimber #6

This is a 61 year old bottomland hardwood stand with the main species being American Elm, Green Ash, Sugarberry, Bitter Pecan, and scattered oaks. It contains approximately 23 tons of sawtimber per acre and 9 tons of pulpwood per acre. The basal area is 79 square feet per acre. The stand also contains about 116 trees per acre. The quality of the current stand is considered to be low due to the many defects found in the stems of the sawtimber trees. The stand sits in a low lying area that tends to hold water during the wet season or periods of high rain. There is a creek on the west boundary and a slough on the east boundary that contribute to the water issue.

Stand Description

This stand contains 66.26 acres. It has an average diameter of 15.6 inches at breast height on the sawtimber trees with about 26 feet of merchantable height on the stem. The pulpwood is about 5.6 inches in diatmeter at breast height on average with about 16 feet of merchantable height on the stem. It sits in a low lying area and absorbs a lot of runoff from surrounding fields.

Stand Recommendations

This stand should be allowed to grow for the next ten years to increase volume. The Mississippi Forestry Commission will continue to monitor the stand on a yearly basis.

Stand Sawtimber #7

This is a 61 year old bottomland hardwood stand with the main species including American Elm, Green Ash, Sugarberry, Bitter Pecan, and scattered oaks. It contains approximately 23 tons of sawtimber per acre and 9 tons of pulpwood per acre. In addition, the stand has a basal area of 79 square feet per acre and contains about 116 trees per acre. The quality of the sawtimber is considered to be low because of the many stem defects. The stand is in a low lying area that will hold water during the wet season and periods of high rain. It has a creek on the west boundary and a slough on the east boundary. Stand Description

This stand contains approximately 1.39 acres. It is managed with the larger fragmented stands. The sawtimber is on average about 15.6 inches in diameter at breast height and has about 26 feet of merchantable height. The pulpwood on average is about 5.6 inches in diameter at breast height and has about 16 feet of merchantable height. This stand sits in a low lying area, contributing to its low quality.

Stand Recommendations

This stand should be allowed to grow for the next 10 years. The Mississippi Forestry Commission will monitor the stand on a yearly basis.

Stand Sawtimber #8

This is a 61 year old bottomland hardwood stand with the main species being American Elm, Green Ash, Sugarberry, Bitter Pecan, and scattered oaks. It contains approximately 23 tons of sawtimber per acre and 9 tons of pulpwood per acre. The basal area is 79 square feet per acre and contains about 116 trees per acre. The quality of the current stand is considered to be low due to the many defects that can be seen in the stems of the sawtimber trees. The stand sits in a low lying area and will hold water during the wet season and periods of heavy rain. This is furthur intensified by the creek on the west boundary and the slough on the east bounday.

Stand Description

This is a bottomland hardwood stand that contains 0.43 acres. It is one of the smallest of the fragmented stands and is managed as part of the larger stands. It is similar to the other stands. The average diameter at breast height of the sawtimber trees is 15.6 inches with about 26 feet of merchantable height. The average diameter at breast height of the pulpwood is 5.6 inches with about 16 feet of merchantable height. It is considered to be of low quality as well.

Stand Recommendations

This stand should be allowed to grow for the next 10 years. The Mississippi Forestry Commission will continue to monitor this stand on a yearly basis.

Stand Sawtimber #9

This is a 61 year old bottomland hardwood stand with the main species being American Elm, Green Ash, Sugarberry, Bitter Pecan, and scattered varieties of oaks. It contains approximately 23 tons per acre of sawtimber and 9 tons per acre of pulpwood. The basal area is 79 square feet per acre, and the stand contains about 116 trees per acre. The quality of the current stand is considered to be low due to the many defects in the stems of sawtimber. The stand sits in a low lying area and will hold water during the wet season and periods of high rain. The western boundary is a creek and the east boundary is a slough which intensifies the effect of the water.

Stand Description

This is a bottomland hardwood stand of average quality containing 0.77 acres. The average size of the sawtimber is 15.6 inches in diameter at breast height and 26 feet in merchantable height. The average size of the pulpwood is 5.6 inches in diameter at breast height and about 16 feet of merchantable height. This is a small, fragmented stand and borders a drainage ditch. It provides some protection from runoff and erosion.

Stand Recommendations

This stand should be allowed to grow for the next 10 years. The Mississippi Forestry Commission will monitor the stand on a yearly basis.

Stand Sawtimber #11

This is a 61 year old bottomland hardwood stand with the main species being American Elm, Green Ash, Sugarberry, Bitter Pecan, and scattered varieties of oaks. It contains approximately 23 tons of sawtimber per acre and 9 tons of pulpwood per acre. The basal area is 79 square feet per acre with about 116 trees per acre. The quality of the current

stand is considered to be low due to the many defects found in the stems of the sawtimber trees. This stand sits in a low lying area also, and may hold water during the wet season and periods of heavy rain. The creek on the western boundary and the slough on the eastern side intensifies this effect.

Stand Description

This is a bottomland hardwood stand containing 0.24 acres. It is one of the smallest fragmented stands and is managed in conjunction with larger areas. The average size of the sawtimber trees is 15.6 inches in diameter at breast height and about 26 feet in merchantable height. The average size of the pulpwood is 5.6 inches in diameter at breast height and has about 16 feet of merchantable height. This stand borders a drainage ditch providing some protection from runoff and erosion.

Stand Recommendations

This stand should be allowed to grow for the next 10 years. The Mississippi Forestry Commission will continue to monitor this stand on a yearly basis.



16-20-7 Shaw School District 2012 to 2021 641.56 Acres





16-20-7 Shaw School District





Stand Activity Schedule for Shaw School District 16 20N 7W

| Strata | Stand | Acti | vity | Acre | Est. Cost | Est. Revenue |
|--------|-------|------|---------------|------|--------------|-----------------|
| | | | | | | |
| | | | | | | |
| | | | Yearly Totals | 0 | \$0.00 | \$0.00 |
| | | | Grand Totals | 0 | \$0.00 | \$0.00 |